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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/509,852	09/30/2004	Nicolas Drevon	Q83107	4310
23373	7590	12/01/2005	EXAMINER	
SUGHRUE MION, PLLC 2100 PENNSYLVANIA AVENUE, N.W. SUITE 800 WASHINGTON, DC 20037			LOFTIN, CELESTE	
			ART UNIT	PAPER NUMBER
			2686	

DATE MAILED: 12/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/509,852	<b>Applicant(s)</b> DREVON, NICOLAS	
	<b>Examiner</b> Celeste L. Loftin	<b>Art Unit</b> 2686	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 04 April 2002.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 September 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>September 30, 2004</u> . | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Specification***

1. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 1 recites the limitation "said system". There is insufficient antecedent basis for this limitation in the claim.

Claim 2 recites the limitation "roaming agreement information" it should read "said" roaming agreement information.

Claim 3 recites the limitation "said subsystem". There is insufficient antecedent basis for this limitation in the claim.

Claim 4 recites the limitation "said roaming agreements". There is insufficient antecedent basis for this limitation in the claim.

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claim 1-16 rejected under 35 U.S.C. 102(e) as being anticipated by Hulkkonen et al. (Hulkkonen), **U.S. Patent 10,296,086..**

Regarding claim 1, Hulkkonen discloses a method of controlling access rights in a cellular mobile radio system, including transfer of roaming agreement information from a core network to a radio access network of said system (the MVNO has an agreement with the network operator of the PLMN to which the RNC belongs, the agreement allows the user equipment to access the radio access network, the RNC has no information about the radio access networks, during the process of transfer the RANAP (message contains common ID which carries the list of allowed target PLMN for the particular user equipment) message is transmitted from the MSC/VLR to the RNC) (**paragraph [0045], [0041], [0043], and [0042]**), in which method said roaming agreement information is transferred independently of the management of radio access bearers at the interface between the core network and the radio access network (a radio access

bearer is established after the RANAP (with the roaming agreement information))  
**(paragraph [0045], [0043], and [0044]).**

Regarding claim 2, Hulkkenon discloses a method according to claim 1, wherein roaming agreement information transferred in this way is common to a public land mobile network (PLMN) ( user equipment can access a PLMN in different networks, the embodiments of the method of the invention described includes different possibilities of implementing the invention) **(paragraph [0036])** identified by a subset of the international mobile subscriber identity (IMSI) number (reads on in addition to the list, the IMSI of the user equipment is transmitted) **(paragraph [0046] and [0047]).**

Regarding claim 3, Hulkkenon discloses a method according to claim 2, wherein said subsystem includes a mobile country code field (MCC) and a mobile network code (MNC) field (the subscribers of the MVNO is allocated from the IMSI the identification is made up of the MNC and MCC) **(paragraph [0012] and [0035]).**

Regarding claim 4, Hulkkenon discloses a method according to claim 1, wherein according to said roaming agreements access to a visited public land mobile network (VPLMN) is authorized for the whole PLMN or limited to certain areas of said VPLMN (reads on the MVNO which has an agreement with the network operator of the PLMN to which the RNC belongs) **(paragraph [0041]).**

Regarding claim 5, Hulkkenon discloses a method according to claim 4, wherein said areas of said VPLMN are areas in which the home public land mobile network (HPLMN) does not itself provide radio coverage (the radio access network is a UMTS radio access network of the PLMN 1 owned by a first network operator and a third radio

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access network is a GSM network in PLMN2 owned by a second network) (**paragraph [0010] and [0035]**).

Regarding claim 6, Hulkkenon discloses a method according to claim 1, wherein the routing agreement information transferred is indicated for each location area (LA) (the list includes MCC/MNC pairs which identify **all** radio access networks to which the respective user equipment can be handed over) (**paragraph [0043]**).

Regarding claim 7, Hulkkenon discloses a method according to claim 1, wherein said roaming agreement information is transferred in the event of modification of said information in the core network (reads on in order to be able to provide lists of allowed target radio access networks to a circuit switched GSM network such lists should be stored again in an, **as** the GSM BSC of the GSM network is connected by an interface to the MSC/VLR of the core network) (**paragraph [0043], [0050] and [0051]**

Regarding claim 8, Hulkkenon discloses a method according to claim 1, wherein the core network is configured beforehand with said roaming agreement information (the MSC/VLR comprises storing means into which the operator of the network has stored a list for each several user equipments having an agreement of sharing network resources with the network operator) (**paragraph [0043] and [0042]**).

Regarding claim 9, Hulkkenon discloses a method according to claim 8, wherein said configuration is effected by operation & maintenance (O&M) means (reads on the MSC/VLR (which holds the data concerning the roaming agreements) comprises storing means into which the operator of the network has stored a list for each several user

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equipments having an agreement of sharing network resources with the network operator) (**paragraph [0043] and [0042]**).

Regarding claim 10, Hulkkenon discloses a method according to claim 1, wherein said roaming agreement information is stored in the core network in a database of the visitor location register (VLR) type (reads on the MSC/VLR ((the network can contain and/or MSC/VLR))which holds the data concerning the roaming agreements) comprises storing means into which the operator of the network has stored a list for each several user equipments having an agreement of sharing network resources with the network operator) (**paragraph [0043], [0029], and [0042]**).

Regarding claim 11, Hulkkenon discloses a Radio access network equipment comprising means adapted to implement a method according to any one of claims 1 to 10 (the agreement allows the user equipment to access the radio access network of the RNC and specified other radio access network belonging to on of the said network operators) (**paragraph [0040] and [0041]**).

Regarding claim 12, Hulkkenon discloses a Radio access network equipment according to claim 11 taking the form of a radio network controller (RNC) (the agreement allows the user equipment to access the radio access network of the RNC and specified other radio access network belonging to on of the said network operators) (**paragraph [0040] and [0041]**).

Regarding claim 13, Hulkkenon discloses a Core network equipment comprising means adapted to implement a method according to claim 1 (reads on the right hand

side of the figure, an MSC/VLR of a core network to which the RNC is connected) **(paragraph [0041] and [0040]).**

Regarding claim 14, Hulkkenon discloses a Core network equipment according to claim 13, wherein, said roaming agreement information being stored in a visitor location register (VLR), said core network equipment takes the form of a mobile switching center (MSC) type equipment connected to a visitor location register (VLR) (reads on the MSC/VLR ((the network can contain and/or MSC/VLR))which holds the data concerning the roaming agreements) comprises storing means into which the operator of the network has stored a list for each several user equipments having an agreement of sharing network resources with the network operator) **(paragraph [0043], [0029], and [0042]).**

Regarding claim 15, Hulkkenon discloses a Core network equipment according to claim 14, wherein, said roaming agreement information being stored in a visitor location register (VLR) (the MSC/VLR comprises storing means into which the operator of the network has stored a list for each several user equipments having an agreement of sharing network resources with the network operator) **(paragraph [0043] and [0042])**, said core network equipment takes the form of a serving GPRS support node (SGSN) type equipment integrating a visitor location register (VLR) (reads on the network of the invention can be or comprises in particular an SGSN and/or a MSC/VLR) **(paragraph [0029]).**

Regarding claim 16, Hulkkenon discloses a mobile radio system comprising means adapted to implement a method according to claim 1 (a MVNO that has user



equipment subscribed to it, where the MVNO has an agreement with the network operator of the PLMN to which the RNC belongs) (**paragraph [0041]**).

### ***Conclusion***

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Blanc et al., US 20044/0092259 A1 discloses a method for establishing a list of neighboring cells in a mobile radio communication system.

Menzel et al., US 2003/0176187 A1 discloses a method and installation for executing a handover in mobile data transmission systems using data duplication.

Soderbacka et al. US 2005/0215246 A1 discloses enabling a content provider initiated content delivery via a specific radio access network.

Palm et al., US 6879832 B1, discloses a method and apparatus for transferring information between mobile terminals and entities in a radio access network.

Khan et al., US 20030119556 A1, discloses a method of balancing backhaul delays for a series of daisy chained radio base stations.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Celeste L. Loftin whose telephone number is 571-272-2842. The examiner can normally be reached on Monday thru Friday 8am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marsha Banks-Harold can be reached on 571-272-7905. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

CL

  
**MARK R. CONTEE**  
**PATENT EXAMINER**